CLAIMS

What is claimed is:

1.   A system for defining and managing an asset, comprising:

a data store for item specification data provided on a computer coupled to a network; and

a data input and supplement toolset linking specification data to business objects.

2.   The system of claim 1 wherein the data input and supplement toolset comprises a computer aided design software plug-in

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3.   The system of claim 1 wherein the data input and supplement toolset comprises a specification creation and editing tool.

4.   The system of claim 1 wherein the data modification toolset includes an item procurement toolset.

5.   The system of claim 4 wherein the item procurement toolset includes a bid tool.

6.   The system of claim 4 wherein the item procurement toolset includes a request for quotation tool.

7.   The system of claim 1 wherein the data input and supplement toolset includes a cost management toolset.

8.   The system of claim 7 wherein the data input and supplement toolset includes an estimate tool.

9.   The system of claim 7 wherein the data input and supplement toolset includes an invoice tool.

10.   The system of claim 7 wherein the data input and supplement toolset includes a budget tool.

11.   The system of claim 7 wherein the data input and supplement toolset includes a payment tool.

12.   The system of claim 7 wherein the data input and supplement toolset includes an contract tool.

13.   The system of claim 1 wherein the data input and supplement toolset includes a teamwork toolset.

14.   The system of claim 3 wherein the project teamwork toolset includes a collaboration tool.

15.   The system of claim 3 wherein the project teamwork toolset includes a message center.

16.   The system of claim 3 wherein the project teamwork toolset includes a request for information tool.

17.   The system of claim 1 wherein the project includes a design phase, a modification phase and a procurement phase, and data is entered and modified throughout each such phase.

18.   The system of claim 1 wherein the data store contains links to other data in the system such that a change to one item or component is propagated to all linked data.

19.   The system of claim 18 wherein change records for the data are maintained.

20.   The system of claim 1 further including a user management system.

21.   The system of claim 20 wherein the user management system allows permissions to be set for users to access data input, a data manager, a procurement system and collaboration information simultaneously.

22.   The system of claim 21 wherein said permissions includes user roles, and said permissions are based on said roles.

23.   The system of claim 21 wherein said permissions include user disciplines, and said permissions are based on said disciplines.

24.   The system of claim 21 wherein said permissions include access based on permissions defined by project or company.

25.   The system of claim 1 wherein the data input and supplement toolset includes a CAD software plug-in .

26.   The system of claim 1 wherein the data input and supplement toolset includes a specification builder tool.

27.   The system of claim 1 wherein the data store is updated in real time.

28.   The system of claim 1 further including an order fulfillment tool.

29. The system of claim 28 wherein said system further includes a virtual area definition application, and said order fulfillment tool interfaces with said virtual areas during a bid process.

30.   A system for defining and managing a physical asset requiring a plurality of items and components, comprising:

a data store for item specification data, including item attributes, for objects incorporated into or consumed during the creation of the asset;

at least one data input system for specification data into the data store; and

at least one item procurement system, the procurement system including a data store interface allowing supplementation of specification data.

31.   The system of claim 30 further including a cost management system including a data store interface allowing modification of specification data.

32.   The system of claim 30 further including a project management system including a data store interface allowing reference to specification data.

33.   The system of claim 30 further including an information collection system including a data store interface.

34.   The system of claim 30 wherein the procurement system includes a bidding tool.

35.   The system of claim 34 wherein data in the data store organized in specification is linked to bidding tool.

36.   The system of claim 35 wherein data in the data store includes attributes and components exploitable by users in formulating and responding to bids.

37.   The system of claim 35 wherein the bidding tool modifies data and updates specifications used by other tools.

38.   The system of claim 35 wherein the bidding tool includes a bidding rule set, including a default rule set and a user-defined business rule set.

39. The system of claim 35 wherein said system further includes a virtual area definition application, and said bidding tool interfaces with said virtual areas during a bid process.

40. The system of claim 30 wherein the procurement system includes a purchasing tool.

41. The system of claim 40 wherein data in the data store organized in specification is linked to purchase tool.

42. The system of claim 41 wherein data in the data store includes attributes and components exploitable by users in formulating and responding to purchases.

43. The system of claim 41 wherein the purchase tool modifies data and updates specifications used by other tools.

44. The system of claim 41 wherein the purchase tool includes a purchase rule set, including a default rule set and a user-defined business rule set.

45. The system of claim 41 wherein said system further includes a virtual area definition application, and said purchase tool interfaces with said virtual areas during a bid process.

46. A system for defining and managing a physical asset requiring a plurality of items and components, comprising:

a data store for item specification data, including item attributes, for objects incorporated into or consumed during the creation of the asset;

at least one data input system for specification data into the data store; and

a cost management system including a data store interface allowing supplementing of specification data.

47.   The system of claim 46 wherein the cost management system includes an estimate tool.

48.   The system of claim 47 wherein said system further includes a virtual area definition application, and said estimate tool incorporates virtual area classifications and specification data.

49.   The system of claim 47 wherein said estimate tool allows assignment of project codes to estimate items which can be rolled into a budget.

50.   The system of claim 47 wherein said estimate tool includes an estimate roll-up tool.

51.   The system of claim 46 wherein the cost management system includes a budgeting tool.

52.   The system of claim 51 wherein said budget tool incorporates links to transactions with item specifications.

53.   The system of claim 51 wherein said budget tool incorporates links to transactions with item purchase orders.

54.   The system of claim 51 wherein said budget tool incorporates transaction documents and defines documents based on default and user-defined business rules.

55.   The system of claim 51 wherein said system further includes a virtual area definition application, and said budget tool interfaces with said virtual areas to allow categorization of budget items by virtual area.

56.   The system of claim 46 wherein the cost management system includes a contract tool.

57.   The system of claim 56 wherein said contract tool is linked to a bidding tool.

58.   The system of claim 56 wherein said system further includes a virtual area definition application, and said contract tool is linked to said virtual areas.

59.   The system of claim 56 wherein modifications made by the contract tool update specifications used by other toolsets.

60.   The system of claim 56 wherein the contract tool includes a set of default and user-defined business rules.

61.   The system of claim 46 wherein the cost management system includes an application for payment tool.

62.   The system of claim 46 wherein the cost management system includes an invoice tool.

63.   A system for defining and managing a physical asset requiring a plurality of items and components, comprising:

a data store for item specification data, including item attributes, for objects incorporated into or consumed during the creation of the asset;

at least one data input system for specification data into the data store; and

a project management system including a data store interface allowing supplement to specification data.

64.   The system of claim 63 further including at least one item procurement system, the procurement system including a data store interface allowing modification of specification data.

65.   The system of claim 63 further including a cost management system including a data store interface allowing modification of specification data.

66.   The system of claim 63 further including an information collection system including a data store interface.

67.   The system of claim 63 wherein the project management system includes multiple projects.

68. The system of claim 63 wherein the data store stores object data by project.

69. A system for defining and managing a physical asset requiring a plurality of items and components, comprising:

a data store for item specification data, including item attributes, for objects incorporated into or consumed during the creation of the asset;

at least one data input system for specification data into the data store; and

a teamwork system including a data store interface.

70. The system of claim 69 further including at least one item procurement system, the procurement system including a data store interface allowing modification of specification data.

71. The system of claim 69 further including a cost management system including a data store interface allowing modification of specification data.

72. The system of claim 69 further including a project management system including a data store interface allowing reference to specification data.

73. An application server coupled to a network, comprising:

a data store including item specification data;

a data input and supplement toolset linking specification data to business objects.

74.   The application server of claim 73 wherein the data input and supplement toolset includes a design application toolset.

75.   The application server of claim 73 wherein the data input and supplement toolset includes a cost toolset.

76.   The application server of claim 73 wherein the data input and supplement toolset includes a procurement toolset.

77.   The application server of claim 73 wherein the data input and supplement toolset includes a project teamwork toolset.

78.   The application server of claim 73 wherein said toolsets modify said database such that each of said toolsets receives real time data updates.

79.   The application server of claim 73 wherein said network is a private network.

80.   The application server of claim 73 wherein said network is a public network.

81.   The application server of claim 73 wherein said network is a combination of public and private networks.

82.   The application server of claim 73 wherein said network is the Internet, and said application tool sets are provided by said application server via the Internet to client devices responsive to a request from said devices.

83. The application server of claim 82 wherein said server communicates data from said database with said client devices via a secure protocol.

84. The application server of claim 73 wherein said applications are configured to run in a browsing application.

85. A system for defining and managing an asset, comprising:

a data store for item specification data provided on a host computer coupled to a network;

a data input toolset;

a data modification toolset including project management tools; and

a teamwork toolset.

86. The system of claim 85 wherein the teamwork toolset includes a collaboration tool

87. The system of claim 86 wherein the collaboration tool is linked to virtual areas defined by a virtual area definition tool.

88. The system of claim 86 wherein the collaboration tool is linked to the data store to allow for modification of data in the data store in a collaborative context.

89. The system of claim 85 wherein the teamwork toolset includes a request for information tool.

90.   The system of claim 85 wherein the teamwork toolset includes a message center.

91.   The system of claim 90 wherein the message center tool is linked to virtual areas defined by a virtual area definition tool.

92.   The system of claim 90 wherein the message center provides threaded messages sorted by project, virtual area, attributes and/or components.

93.   The system of claim 85 wherein the teamwork toolset includes a meeting minutes tool.

94.   The system of claim 85 wherein the system further includes a project setup system.

95.   The system of claim 94 wherein the project setup system includes a default project setup.

96.   The system of claim 95 wherein the project setup system includes a discipline and role definition, and a default setup includes an assignment of disciplines by roles.

97.   The system of claim 95 wherein the project setup system includes a discipline and role definition, and a default setup includes an assignment of roles by discipline.

98.   The system of claim 85 wherein the project setup system allows specification of data to be shared for a property across different projects.

99.   The system of claim 85 wherein the project setup system allows ownership of property by different organization throughout the project.

100.   A method of allowing users to manage an asset, comprising:

providing an application server coupled to a network;

providing, responsive to a user request, a data input tool to a user client;

receiving data from the client and storing it in a database;

providing, responsive to a user request, data modification tools, including project management tools, for modifying the data to the client device; and by

hosting a collaboration environment on said application server.

101.   The method of claim 100 further including the step of:

charging users on a per seat basis for access to said application server.

102.   The method of claim 100 further including the step of:

charging users on a per access basis for access to said application server.

103.   The method of claim 100 further including the step of:

       charging users on a per-project basis for access to said application server.

104.   The method of claim 100 further including the step of charging users based on a data base size allocated to the user.

105.   A method for managing a project, comprising:

       dividing items used in completing the project into objects;

       storing, for at least one object, specification data into a database; and

       providing tools for manipulating the data, including:

              a data input tool;

              an item specification system;

              a procurement system;

              a cost management system;

              a project management system.